ADESF 4.10.4 Asoreo



Science Applications International Corporation
An Employee-Owned Company

# Technology Services Company

AUG 2 1 1992 SUPERFUND

DCN: TZ4-C10006-EP-11423

August 21, 1992

Mr. Kevin Rochlin U.S. Environmental Protection Agency, Region 10 1200 Sixth Avenue Seattle, WA 98101

Subject: EPA Contract No. 68-W9-0008, WA No. C10006

Equipment Salvage Report

Dear Mr. Rochlin:

The purpose of this letter is to transmit the Equipment Salvage Report for the #4 converter furnace shell and the north crane from the #1 refinery building, located at Asarco's Tacoma smelter. SAIC/TSC provided oversight during the salvage operations which began July 6, 1992, and were concluded August 7, 1992.

The #4 converter furnace shell was purchased by Industrial Minera Mexico, a Mexican copper smelting company which is 34% owned by Asarco. Mr. Jim Byron of Riedel Environmental Services, Portland, Oregon, was in charge of the converter salvage. Salvage of the converter was performed in accordance with the Focused Work Plan for Removing the #4 Converter (dated 2/25/92), approved by EPA March 11, 1992.

The #1 refinery overhead crane was purchased by the J.D. English Steel Company of Tacoma, Washington. Mr. Neil Jensen of General Construction Company, Tacoma, Washington, was in charge of the crane salvage. Salvage of the crane was performed in accordance with the Focused Work Plan for Removing the North Crane from the #1 Refinery Building (dated 7/1/92), approved by EPA July 14, 1992.

The attached report details activities observed during the salvage operation.

Photographs of the removal, sampling, and decontamination of this equipment are also attached.



K. Rochlin August 21, 1992 Page 2



If you have any questions, please call me at (206) 485-2818. Sincerely,

Technology Services Company, A Division of SCIENCE APPLICATION INTERNATIONAL CORPORATION

David P. Corbett

Senior Environmental Scientist

Work Assignment Manager

Enclosure

cc: P. Rubenstein, EPA RPO (w/o enclosure)

T. Tobin, SAIC/TSC RPM (w/o enclosure)

# EQUIPMENT SALVAGE REPORT

#### A. #4 Converter

# Introduction

The #4 converter furnace shell and miscellaneous associated parts was purchased by Industrial Minera Mexico, a copper smelting company, 34% owned by Asarco. The intended use of the converter is the same as it was in Tacoma, that is, as an intermediate step in the copper smelting process. The equipment salvaged included the converter shell, trunions, drive motor, water jackets, control panel, and controller.

# Removal of the Converter

The converter was detached from the location by unbolting and torch cutting sections. The venturi, exhaust hood, and structural steel removed to allow for salvage of the converter were placed in a pile opposite the converter aisle. These parts were not included in the salvage. Gross contamination was removed with shovels and brooms after the converter was rolled out to the center of the converter alley. Water sprays were used to keep dust down. All Reidel personnel involved in removal wore level C personal protection.

# Sampling

Three sampling locations were selected by Mr. Jim Gillie of Hydrometrics, Inc., prior to any decontamination activities. SAIC/TSC approved the locations. Mr. Gillie followed the sampling procedure described in Appendix A of the Focused Work Plan for Removing #4 Converter. After the converter was removed and decontaminated, the same locations were sampled again, using the same procedure, by Mr. Jeffery Cross, also of Hydrometrics. Mr. Gillie indicated that sample results would be forwarded to EPA as soon as possible.

### Decontamination

Initially, hand tools were used to remove gross contamination. Shovels, chisels, and brooms were used to remove accretions adhering to all parts salvaged. Once the converter shell was rolled out of the converter aisle, a plastic-coated canvas tarp was spread out on the ground surface in an area immediately north of the converter building (east side). The high pressure (2,000 psi) water washing unit was used to decontaminate the shell and the truck dollies. The converter shell was then moved to the barge loading area north of the north dock. All associated parts were washed at decon station DC-5, east of the fine ore bins building, with wash water transferred to the waste water treatment system.

Prior to loading onto the barge, the converter shell and all associated parts were visually inspected and found to be free of any loose materials or accretions.

# Transport

The converter shell was loaded onto a barge and shipped August 8, 1992. Associated parts were decontaminated with the high pressure unit and trucked off site the following week.

# B. North Crane from the #1 Refinery Building

# Introduction

J.D. English Steel Company has purchased the north crane in the #1 Refinery building and miscellaneous steel beams and rail associated with the operation of the crane. The intended use of the crane will be in J.D. English Company's Tacoma plant. Salvage work was started July 20, 1992 and the crane was trucked off site August 3, 1992.

#### Removal

The crane was removed using standard rigging practice and procedures. Sections of I-beams and rail (360 linear feet) were removed from the structure using cutting torches. The crane and associated parts were lowered onto a lowboy and transported to the decontamination station (DC-5) east of the fine ore bins building.

# Decontamination

Once at the decontamination station, the 2,000 psi pressure washer was used to remove materials adhering to the crane. Since all material on the crane was rather loose, the washing was very effective. Wash water was transferred to the waste water treatment system. Sampling of the north crane was not required.

# Transport

SAIC/TSC inspected all parts to be removed from the site once the decontamination process was completed and the crane was trucked off site August 3, 1992.

# PHOTOGRAPHS (cont'd)

- 24. Plastic coated canvas tarp used for shell and truck decontamination.
- 25. Cooling water jackets, drive motor, and associated parts for #4 converter.
- 26. Salvage contractors vehicle.
- 27. Drive motor for converter.
- 28. Jeffery Cross (Hydrometrics) taking post-decon samples.
- 29. Converter shell after final decon. Sampling template near center of shell.
- 30. Converter shell. Fabricating shipping saddles.
- 31. Converter shell at loading dock.
- 32. Converter shell at loading dock.
- 33. Converter shell at loading dock.
- 34. Inside of converter shell after final decon.
- 35. Converter shell with access ladder for top sample.
- 36. Lip of converter shell showing effectiveness of decon.
- 37. Converter end doors and supports after final decon.

# B. NORTH CRANE at #1 REFINERY

- Center section of crane, with trolley, in place at #1 refinery.
- Crane in place at #1 refinery. Note side rails on top of beams.
- 3. Crane in place at #1 refinery. Note side rails on top of beams.
- 4. Beams and rails along west side of #1 Refinery.
- 5. Beams and rails along east side of #1 Refinery.
- 6. Beam sections sitting on crane rails prior to decontamination.
- 7. Beam sections prior to decontamination.
- 8. Beam surface partially decontaminated. Note wash gun on beam.

#### **PHOTOGRAPHS**

## A. #4 CONVERTER

- 1. Converter alley, looking south. Note converter controller units near rear of truck crane.
- 2. #4 converter shell sitting on trunions. Refractory brick lining not part of salvage and has been removed.
- 3. #4 converter. Belly pan not part of salvage.
- 4. Removing belly pan from #4 converter.
- 5. Removing support structure from #4 converter. Hood above converter not part of salvage.
- 6. #4 converter.
- 7. Removing hood over #4 converter.
- 8. Inside of #4 converter.
- 9. Source of water for dust and fire suppression.
- 10. Flagged work area with cutting torch supplies, emergency eyewash, and boot decon station.
- 11. Flagged work area.
- 12. Dust suppression for truck traffic.
- 13. Rear of #4 converter work area with cutting torch caddy.
- 14. Controller units, drive gear, and end door for #4 converter.
- 15. Crane removing hood from #4 converter.
- 16. Sample template on converter shell.
- 17. Sample template on converter shell.
- 18. Readying shell for roll out.
- 19. Rolling out converter.
- 20. High pressure water washing unit at decon station.
- 21. Miscellaneous parts and washing unit at decon station.
- 22. Decon station located at north end of fine ore bins building.
- 23. Sump and pump at decon station.

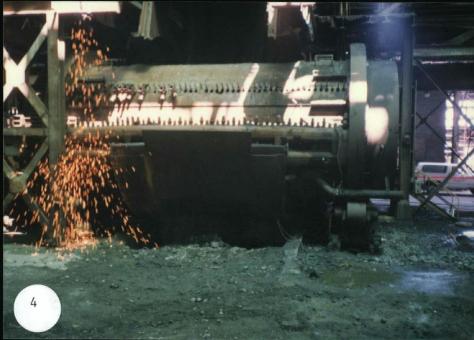
# PHOTOGRAPHS (cont'd)

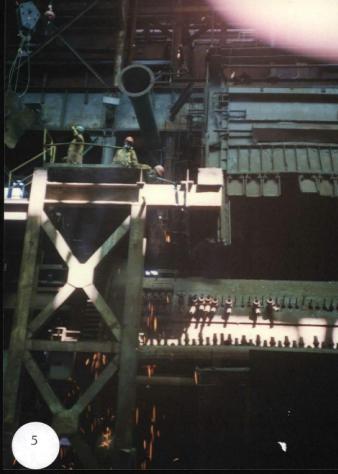
- 9. Top surface of beam. Left side is deconned, right side is not.
- 10. Pressure washing beam. Note crane rails in foreground.
- 11. Pressure washing beam. Note crane rails in foreground.
- 12. North crane after pressure washing.
- 13. Pressure washing beam prior to loading on truck.
- 14. Washed beams in foreground, crane loaded on truck in background.
- 15. Washed beams and rails.
- 16. Crane during final inspection.
- 17. Crane during final inspection.
- 18. Crane during final inspection.
- 19. Crane being trucked off site.
- 20. Crane being trucked off site.
- 21. Crane being trucked off site.



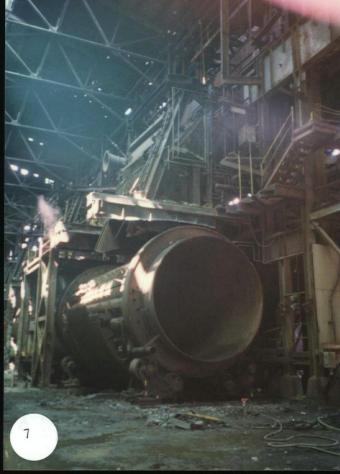




















































# SERVICES INC

A SLIBSIDIARY OF RIEDEL ENVIRONMENTAL TECHNOLOGIES INC.

1 (800) 334-0004

PORTLAND, OREGON































































